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The preceding data are sufficient to afford us some approximation to the total amount raised in the metropolis, in 1842, by direct taxation upon its 1,961,810 inhabitants, and 8,082,369*l.* of assessed rental; and for the purposes of such an estimate, we may disregard the different periods of the year at which the accounts are made out for the Police, and for the Poor Law and County Rate Returns, as we have already disregarded them in compiling the preceding tables, with a view to comparisons which are not vitiated by this slight discrepancy. We find 111,938*l.* 13*s.* raised under the name of County Rates; 207,202*l.* 15*s.* 3½*d.* under that of Police Rates, exclusive of the 68,161*l.* 15*s.* 4*d.* paid to the same account by the Treasury; and 588,884*l.* applied in the relief of the poor in various forms; making a total of 908,025*l.* 8*s.* 3½*d.* paid by the several parishes and places, to meet which the total amount levied under the name of Poor's Rates was 877,666*l.* 18*s.* Add to this sum, about 100,000*l.* for Sewers' Rates; 400,000*l.* for paving, lighting, and cleansing the streets; and 340,000*l.* for a supply of water, and we have a total of 1,748,025*l.* 8*s.* levied by direct taxation. This is exclusive of church rates and dues, and the payments under the name of tithes in the city; and without any reference to the enormous charge upon the metropolis for the supply of gas to private houses and establishments. The latter may assume the name of a competitive speculation; but it is, in reality, a municipal service, and must ever, on its present system, involve both protection and monopoly.

The indirect taxation of the metropolis is alone a subject sufficiently extensive for separate inquiry. It consists of fees in the courts of civil and criminal justice, and to officers of the prisons and police; fees on licenses to ply for hire, &c.; port, navigation, and metage dues; tolls of the markets, streets, and bridges; fees to surveyors under the building act; the contributions to maintain a fire police, made by the several insurance companies; fees for the use of cemeteries, &c. Reserving a notice of this indirect taxation for a future opportunity, I have now, in obedience to the desire expressed at a former meeting, to describe more fully the system of taxation and expenditure adopted for the sewerage of the metropolis.

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*History and Statistics of the Present System of Sewerage in the Metropolis.* By JOSEPH FLETCHER, Esq., Barrister-at-Law, Honorary Secretary.

[Read before the Statistical Society of London, 18th March, 1844.]

HAVING been requested, at the last meeting of this Society, to enter into more detail on the subject of the sewerage of the metropolis than was within the scope of the paper which I had then the honour of reading to the fellows assembled, I have, in the following pages, collected together the facts which supply a rapid outline of the history and present state of the Commissions, to which this portion of the public works of the metropolis is entrusted; and it must be owned that it is not a little humiliating to find that what is now deemed essentially requisite for town life in regard to drainage, has never once been contemplated by the general laws passed for the execution of such works. In fact, the legal purposes and powers of the existing Commissions of Sewers, except where a very partial aid is derived from local acts, are limited to the surface drainage of a marsh; and the metropolis is at the present

moment, in the eye of the law, under the ancient and approved drainage laws of the Marsh of Romney in Kent; the first reclaimed of all the great maritime levels in England.

By the prescriptive constitution of this district, the drainage of the marsh, and the support of the sea-walls, was entrusted to a body of 24 jurats, appointed by as many townships or manors, and a bailiff, appointed by the same, who appears to have been, like the Saxon reeves generally, at once the presiding and the executive officer. This body parcelled out, among the several proprietors, the works to be maintained; and in cases of neglect, the repairs were made by the bailiff, and charged by the jurats upon the party specially liable; the method of proceeding by common assessment not being established until the thirteenth century. The customary laws under which this body existed and acted were revised and confirmed in the 41st of Henry III., by the Justice Henry de Bathe, who was dispatched into the marsh for the redress of past grievances, and the drawing up rules for the future. Edward I., in the sixteenth year of his reign, issued a special commission to John de Lovetot, and Henry de Apuldefeld, to view the banks and ditches upon the sea coast and parts adjacent within the county of Kent, in divers places then broken, through the violence of the sea, and to inquire by whose default this damage had happened; and together with the bailiffs of liberties, and others in those parts, to distrain all those which held any lands and tenements there, and had or might have defence and preservation in any sort, by the said banks and ditches, according to the quantity of the said lands and tenements, either by the number of acres, or by carucates, for the necessary repairs of those banks and ditches, as often as there should be need. The Commissioners, with the jurats, and others of the marsh, confirmed the ordinances of Henry de Bathe, and improved them by incorporating into the government of the marsh the method of general assessment; assigning the election of the bailiff, called the king's bailiff, to the lords of the marsh. And Henry de Apuldefeld and Bertram de Tancrey, similarly appointed in the eighteenth year of his reign, extended the marsh laws, with the like common assent, to every hundred and township in Kent, as well by the sea coast as bordering on the Thames and other waters, in which the marsh lands are subject to inundation; twelve or six lawful men being to this end chosen in each, according to the largeness of the hundreds or towns.

Other commissions were on various occasions issued by the Crown during this and the succeeding reigns, for the preservation of the walls and ditches of Romney Marsh; the regulations for their maintenance were further improved; and these laws and regulations at length became so famous, that King Henry VI., in the sixth year of his reign, by the advice and assent of the Lords spiritual and temporal, and at the special instance of the Commons of the realm, then assembled in his Parliament, holden at Westminster, having considered the great damage and losses which had often happened by the excessive rising of waters in divers parts of the realm, and that much greater was like to ensue, if remedy were not hastily provided, ordained by statute of 6 Henry VI., c. 5, that for 10 years then next ensuing, several commissions of sewers should be made to divers persons by the Chancellor of England, for the time to come, in all parts of this his realm, where it should be needful (the form of which commission is recited in the statute), and amongst other things, gave unto the said commissioners special power and direction "to

make and ordain necessary and convenable statutes and ordinances, for the salvation and conservation of the sea-banks and marshes, and the parts adjoining, according to the laws and customs of Romney Marsh.’

Commissions of sewers had been issued on special occasions of difficulty, during the preceding reigns, for other marsh districts than that of Romney; and this statute added greatly to the powers of such commissioners; for it authorized them to make officers, take accounts of their expeditors, set labourers on work, and rate their wages. A supplemental statute of the 8th of Henry VI., c. 3, supplied some defects in the former, as also did one of the 12th of Edward IV., c. 7, for taking away weares and fishgarths; and those of the 18th of Henry VI., c. 10; 23rd Henry VI., c. 9; 12th Edward IV., c. 6; 4th Henry VII., c. 1; and 6th Henry VIII., c. 10, successively continued its powers until the passing of the 23rd Henry VIII., c. 5, which is the existing statute of sewers, and chiefly governs the metropolitan as it does all the other commissions.

It provides that “Commissions of Sewers and other the Premises shall be directed in all parts within this realm, from time to time, where and when need shall require,” according to the manner and form prescribed “to such substantial and indifferent persons as shall be named by the Lord Chancellor and Lord Treasurer of England, and the two Chief Justices for the time being,\* or by three of them, whereof the Lord Chancellor to be one.” Any six commissioners, of whom three must be of the quorum, may act as the king’s justices to survey the walls, ditches, banks, gutters, sewers, gates, calcies, bridges, streams, and other defences lying within the limits assigned; and also all fishgarths, mill-dams, locks, hebbing-weares, keeps, flood-gates, and other like annoyances, and the same cause to be made, corrected, repaired, amended, put down or reformed, as case shall require, after their wisdoms and discretions, as well according to the statutes and ordinances already made, as by the authority of the present ordinances; after ascertaining by a jury the persons equitably liable to the charge of such works, and the proportions in which they ought to be assessed.

By the terms of the Commission recited in this statute, the Commissioners are empowered to appoint keepers, bailiffs, surveyors, collectors, expeditors, and other ministers and officers, who shall account to them; to impress workmen, and take materials, carriages, &c.; to make statutes and ordinances for the safeguard, conservation, redress, correction, and reformation of the premises, *after the laws and customs of Romney Marsh, in the county of Kent, or otherwise*; to determine suits and complaints brought before them; to make and direct writs, precepts, warrants, and other commandments to sheriffs, bailiffs, and all other ministers, officers, and persons, as well within liberties as without, and compel the return of the same; and to compel by distress, fines, and americiaments, or by other punishments, ways, or means, all such as shall be negligent, gainsaying, or rebelling in the said works, reparations, or reformations of the premises, or negligent in the due execution of this Commission; saving the king the fines and americiaments due to the crown; but requiring all sheriffs, bailiffs, and

\* At present, the Lord Chancellor and the two Chief Justices.

other officers to return juries at the desire of the Commissioners and to attend upon them. The Commissioners must take a prescribed oath to the faithful and upright discharge of the duties devolved upon them; and may sell lands in discharge of arrears of rates, if they enrol their decree or ordinance to that effect, on parchment, and certify the same into the Court of Chancery, for the royal assent thereto.

Every Commissioner must possess estate in fee simple, fee tail, or for life, to the value of 40 marks per annum; or be resident and free in a city, borough, or town corporate, and possessed of moveable substance to the clear value of 100*l.*; or be an utter barrister; and in any case be duly sworn, or forfeit 40*l.* for every attempt to sit by virtue of any Commission of Sewers, without taking the required oath. A general avowry is allowed in case of actions against officers for taking any distress; and treble damages are given to them, if the verdict be for the defendant. The Commissioners are allowed 4*s.* out of their public funds, for every day in which they "take pain" in the execution of the Commission of Sewers, and are to determine the salaries of their officers and servants. By the 25th Henry VIII., c. 10., none can be put in commission who are not resident in the county wherein it is to be executed; and a penalty of 5 marks is imposed on any Commissioner refusing to take the prescribed oath.

The 3rd and 4th of Edward VI., c. 8, makes this statute perpetual; subjects the Crown lands to its full operation, in accordance with provisions to the like effect in the original statute; and extends the duration of the several commissions from three to five years; a term further extended by the 13th Eliz., c. 9, to 10 years, unless they be repealed by other commissions, or rendered obsolete by supersedeas. All the walls, ditches, banks, gutters, sewers, gates, causeys, bridges, and the streams and water-courses, which have their passage into the river Thames, within two miles of the City of London, were brought under the statute of sewers by the 3rd of James I., c. 14; and the several metropolitan commissions derive various powers from the local Act of the 2nd of William and Mary, s. 2, c. 8, "For paving and cleansing the streets in the Cities of London and Westminster, and suburbs and liberties thereof, and out-parishes in the County of Middlesex, and in the Borough of Southwark, and other places within the weekly bills of mortality, in the County of Surrey." Lastly, the 7th of Anne, c. 9, gave to the Committee of Common Council for sewers and paving in the City of London the same powers as the Commissioners of sewers for counties; at the same time that the 9th of Anne, c. 10, extended the powers of all such Commissioners in the sale of lands for arrears to copyholds, which had escaped the terms of former statutes.

Under the statute of sewers, the metropolis, and the adjacent districts, comprehended within a circle of 10 miles from the post-office, are divided into six trusts, besides that of the City and Liberties; each possessing a separate and independent jurisdiction within its own limits. These trusts are: the Commission of Sewers for the City and Liberties of Westminster and part of the County of Middlesex, the operations of which are aided by several local Acts, of which the principal is that of the 47th of George III.; the Commission of Sewers for Holborn and Finsbury, and part of the County of Middlesex, having local Acts of the 18th and 54th of George III.; the Commission of

Sewers for the Tower Hamlets, which has no local Act; the Blackwall, or Poplar and Stebunheath Marsh Commission of Sewers, likewise without any local Act; the Commission of Sewers from the river Ravensbourne, in Kent, to the Ember branch of the river Mole, in Surrey, which has three local Acts, of the 49th, 50th, and 53rd of George III.; and the Commission of Sewers for Regent-street, under a local Act of the 43rd of George III. Those of the Tower Hamlets and Blackwall are, in fact, the only commissions unaided by local statutes.

The commissions issued by the Crown, under the 23rd of Henry VIII., c. 5, however, elect a very different administrative body from that of Romney Marsh. Under the latter, the whole of the extensive powers for draining and embanking are vested in the body locally elected, who have been subjected only to a sort of visitorial authority on the part of the Crown. But the modern commissions of sewers, framed at a time when the prerogative was at its highest stretch of power, vests nearly the whole of these powers in the nominees of the Crown; no longer merely presiding officers, but a whole local council; the inhabitants of the district being called upon merely to exercise the subsidiary functions of jurymen, if called upon by the sheriff so to do, when the Commissioners want a jury. Not only are the greatest powers possessed by the Commissioners, therefore, those designed merely for the drainage and embanking of fens; but they are without the constitutional advantage, except in the City, of that local election by which the jurats of Romney Marsh are still placed in office.

Upwards of two centuries ago, the learned Mr. Robert Callis, whose readings upon the statute of sewers are still the principal authority in this branch of local law, pointed out the great evils arising from this want of responsibility to public opinion in the appointment of the Commissioners. "Because that persons of profound wisdoms, deep experience, tried learning, generous disposition, and good estate, should be put into these commissions of sewers, the statute did make choice of four honourable persons to have and take the nominations of such as should, for their integrity, learning, wealth, wisdom, and experience, be worthy to be put into this Commission. But as these great persons of honour, by their high places, are most commonly busied in matters of great importance, they many times refer these matters to others, by means whereof divers persons have of late years crept into Commission, which this statute doth not allow of, which do not only want knowledge and experience, but which are also transported and carried away with self-will, and serve most commonly to make a faction of the greater number to carry away businesses, when the graver and wiser sort are forced (being overladen with popular voices) to give way to run into contrary courses, and are made to surcease from making good and wholesome laws and ordinances, and sometimes are, as it were, forced to agree to those which are worse."\*

In what terms the learned commentator would have expressed himself concerning the present system of self-election, under which these great persons of honour refer the appointment of Commissioners to the Commissioners themselves, it is not difficult to divine. The actual system is, on the termination of a Commission, for the existing Commissioners

\* Callis, edit. 1824, p. 268-9.

to nominate their successors ; among whom are included commonly the principal proprietors in the district, of whom it is well known that very few will even take the oaths ; others, who, though well qualified, will seldom attend ; others who will attend for the dignity, honour, and dinner, and to make up a board ; and, finally, a small knot of working men, usually of inferior station and fortune, who are the real trustees of the extraordinary powers and revenues of these anomalous bodies. It is the latter who form an express executive committee in some Commissions, and virtually do so, by their constant attendance and sole knowledge of the business in the rest ; and allowing to these gentlemen at least the average of human virtue, it is not surprising that many should doubt the propriety of entrusting an almost despotic power to such coteries of virtually self-appointed persons.

They are not only an administrative body for maintaining and improving the drainage, by such means as they may think proper, and levying any amount of money which they may please, to defray the cost of doing so ; but they form a court of record, though not in *aliquo certo loco*, with power to amerce, fine, and imprison even the sheriff himself, if, upon writ or warrant directed to him, he does not return a jury, or make attendance, as the case may be ; and to make laws, ordinances, and decrees, binding upon every one, under pain of being visited by the same unlimited power. It was for a long time debated whether they had authority to make new banks, drains, &c., or only maintain the old ones ; but Callis's opinion is decidedly in favour of the larger authority, and has commonly been followed. The Commissioners may order works on their personal view and survey, with such evidence in aid as they may think proper ; but it is generally the business of a jury, summoned by the sheriff, on the warrant of the Commissioners, to present impediments and nuisances ; what works want executing ; the persons who are bound to perform them, or are liable to the general charge of their execution ; those who for any cause, or by any custom, are exempt from such charges ; as also the misconduct of officers, and contempts and neglects of the decrees and orders of the court. But the labours of the juries, who, when assembled, are necessarily under the guidance of the surveyor of each trust, are little more than a form of perambulation, terminating each day with a tavern dinner, which the Commissioners pay for, as for their own, out of the rates. It is obvious, also, that the surveyor is a person upon whom the Commissioners will commonly be as much dependent, in details, as the juries themselves ; and yet this officer, so far as the public is concerned, is thus screened from responsibility in every direction.

More frontage involves a *prima facie* liability to the repair of banks ; and liability to various works may arise from covenant, prescription, custom or tenure ; but the common ground of assessment to sewer's rate, and the universal ground in London, is the *usus rei*, to all who derive a benefit or avoid a damage through the works under the Commissioners. Rates on this ground are sometimes appointed by presentment of a jury, and sometimes by the Commissioners without the intervention of a jury ; and must be resorted to wherever the special liabilities are not sufficient to meet the charge of the works required. The sewers' rates are considered a landlord's tax ; but they are necessarily levied on the occupier, who may show his want of the whole interest, and the

Commissioners would distribute the burthen accordingly; but, practically, the adjustment is left to be made between the parties individually; and, generally speaking, they are a tax left to be defrayed by the tenant, who, on newly coming into his premises is liable for any amount of arrears.

The great vale of the lower Thames, from Maidenhead to the sea, is enclosed by ranges of chalk hills, which form the North Downs of Surrey and Kent on the south, and the Chiltern Forest and succeeding hills, in Bucks and Herts, on the north. Inclining gradually towards the Thames, the chalk strata form a great basin of very irregular circuit and surface, which is occupied by the various deposits of clay and gravel, known to geologists under the name of the London Clay Formation. The gentle elevations rising from the northern bank of the Thames, on which the cities of London and Westminster are chiefly built, are composed of a sound dry gravel, as also is the subsoil of the lower lands bordering upon the river, even on the southern side, to Lambeth and Camberwell. But to these gravels, both on the north and south, succeed beds of deep and cold clay, over which the town is rapidly extending itself, as its suburbs successively climb towards the heights of Hampstead and Highgate, at a distance of four miles from the river on one side, and those of Norwood, at a distance of seven miles from it on the other; both of which ranges consist of beds of ferruginous and sterile sand, clay, and gravel.

It is difficult to carry back the imagination to the period when the City of London occupied only one or two of the little hills rising above the first deep water of the Thames, and yet unless we do this, it will be almost impossible to understand the primitive state in which its public works remained to a comparatively recent period, and the rude principles which yet govern them in various respects, more particularly in regard to drainage. Some idea of the state from which the sewerage has gradually brought the town, may be formed from the following memoranda as to its hydrographical state, when the brooks which flowed through and about the city were required to supply the inhabitants with water no less than to cleanse their streets :\*—

“The River of Wells, so called from its being formed by the united streams from several wells in the neighbourhood of the Charter House and Smithfield, flowed to Holborn Bridge. The Old-bourne, or Hill-bourne, so called from its running down a hill, rose near Holborn Bars, and running east, joined the River of Wells at Holborn Bridge; from thence the united streams flowed between the Fleet and Bridewell into the Thames near Blackfriars Bridge. In 1307, at a Parliament held at Carlisle, the 35th of Edward I., Henry Lacy, Earl of Lincoln, complained that whereas formerly the watercourse under the Fleet and Holborn Bridges was sufficiently deep and wide to allow ten or twelve ships at once, loaded with merchandize, to come up to Holborn Bridge, but that in 1199, in the first year of his reign, King John had granted to the Knights Templars ground to erect a mill upon, at Castle Baynard, and the whole of the water in this watercourse (which was afterwards called Turn Mill Brook) to work it; owing to which diversion chiefly, and also

\* Derived from a paper by Thos. Wicksteed, Esq., read before the Society of Arts, May 24th, 1835.



to the filth of the Tanners choking it up, and divers other impediments, vessels could not now enter as they were wont ; he therefore prayed that the mayor and sheriffs of London might be directed to view the water-course to substantiate his statements. It was in consequence cleansed, but was never again of the depth or breadth that it had formerly been. In 1502, the 17th of Henry VII., the whole course of Fleet Dyke, then so called, was effectually cleansed so as to allow boats with fish and fuel to navigate as far as Holborn Bridge.

“ In 1589, in the 31st of Elizabeth’s reign, the Common Council of the city granted a fifteenth for the cleansing of this brook, or dyke, and for this purpose the springs on Hampstead Heath were collected into one head, and conveyed by means of a channel to Fleet Ditch, to scour it out ; but after spending a large sum of money, the work proved a failure, and the banks falling in, the ditch was choked up more than ever.

“ In 1668, in Charles the Second’s reign, after the Fire of London, it was again cleansed, and a handsome canal was made with brick walls and wharfs on each side as far as Holborn Bridge, 2100 feet long, 40 feet wide, and 5 feet deep at a middling tide ; but the expense of making this canal, with its wharfs, &c., (amounting to nearly 28,000*l.*.) and the annual cost of keeping it free from mud was so great, that in 1733 the citizens obtained powers from Parliament to fill up the ditch between Fleet Street and Holborn, and to build a market thereon ; the Act providing that two spacious arches, of ten feet high and six feet wide, should be made and maintained as common sewers, to carry off the waters of the rivulets and sewers that used to fall into the ditch ; and in 1760, in George the Third’s reign, when Blackfriars Bridge was built, the remaining part of the Fleet Ditch, from Fleet Street to the Thames, was filled in, and the sewer was extended. The Old (or Hill) Bourne is also now covered over.

“ Wall-brook derived its name from the circumstance of its being the only running brook that passed through the City walls. It entered the city near to the east end of Bethlem Hospital, between Bishopsgate and Moorgate, passed on to Lothbury, under St. Mildred’s church, Bucklersbury, Wallbrook Street, and Dowgate Hill, into the Thames. It is said to have been in ancient times navigable as far as Bucklersbury. It is now arched over, and houses are built over it in many places.

“ Langbourne-water was a long and great stream of water breaking out of the ground at the east end of Fenchurch Street, and running directly west, nearly to the end of Lombard Street, turned to the south and divided into several rivulets, some falling into the Wall-brook, and others running in separate streams to the Thames at Dowgate ; the division, or *sharing*, of the stream gave the name to Sharebourne (or Sherbourne) Lane. A watercourse also intersected the Strand at Salisbury Street, and another near Somerset House.

“ Besides these running streams there were a great many wells and pools, namely, Holywell, in Shoreditch ; Clement’s Well, in St. Clement’s Inn in the Strand ; Clerks’ Well, near Clerkenwell Church, so called from the parish clerks of the City of London, who used formerly to meet there for the purpose of representing certain parts of the Scriptures in a theatrical manner. ‘ These wells,’ says Fitz Stephen, ‘ may be esteemed the principal, as being much the best frequented, both by scholars from the schools, and the youth of the City, when in a summer’s

evening they were disposed to take an airing.' Near to Clerks' Well was Skinners' Well, where also plays were in ancient times performed.

"More eastward, towards the Charter House, were Faggess-well, Todswell, Lodders-well and Red-well, which, with another in Smithfield, called the Horse Pool, united to form the River of Wells. Dame-Annis-the Clear Well was in Hoxton, and, somewhat west of this was Perilous Pool, now called Peerless Pool. Without Cripplegate there was a large pool supplied by Crowder's Well, on the north-west side of St. Giles's churchyard. There was a fountain in New Palace Yard, Westminster; and there were two wells in Shadwell, one of which, a fine and clear spring near to St. Paul's church, gave this suburb its name. Besides the above there were likewise many smaller ones, the situation of which may still be discovered by the names of the streets and alleys or places in their neighbourhood, such as Monks' Well, Bride Well, formerly Bridget's Well, &c."

For centuries after these brooks and wells had become insufficient or unusable through the increase of population and of filth, the ignorance of any drainage but by the surface or by cesspools, left them to augment the general noisomeness of the streets; and down to the great fire of 1666, and even later, it is obvious, from the regulations in use for the streets,\* that the drainage of the whole town must have been in a very lamentable state; for they are precisely such as would now be applicable to the dirtiest little town in Wales or Ireland. Thus it is provided that "no man shall cast any urine boles or ordure boles into the streets by day or night, afore the hour of nine in the night; and also, he shall not cast it out, but bring it down, and lay it in the channel, under the pain of three shillings and fourpence; and if he do cast it upon any person's head, the party to have a lawful recompense, if he have hurt thereby;" and again, "that no man shall sweep the dirt or filth of the street into the channel in the time of any rain, or at any other time, under pain of six shillings and eightpence;" a provision obviously designed to preserve the waters of the Thames, the Fleet, and Walbrook in purity for the inhabitants to drink; thus poisoning them less obviously, but not less effectually with the air, to save them from being poisoned by the water.

The destruction of nearly the whole city by fire, however, in an age of great material progress, opened the way for an entirely new era in this department of civic economy; and by the "Rebuilding Act" of 1667, (§ 20), it was enacted "that the number and places for all common sewers, drains, and vaults, within the City of London and liberties thereof, and the order and manner of paving and pitching the streets and lanes within the same, should be designed and set out by such and so many persons as the mayor, aldermen, and commonalty of the said city, in common council assembled, should, from time to time, authorize and appoint under their common seal, or the major part of them; to which persons several powers and authorities were thereby given for making new vaults, drains, or sewers, or for cutting into any drain or sewer already made; and for altering, enlarging, amending, cleansing, and scouring of any old vaults, sinks, or common sewers; for the better effecting whereof, it was made lawful for the persons so authorised, or any seven or more of them, to impose any reasonable tax upon all houses

\* Bohun, p. 107-12.

within the said city and liberties, in proportion to the benefit they shall receive thereby ; and to enforce payment of the same by distress and sale of the goods of the party chargeable therewith. This clause of the Rebuilding Act, which was to remain in force only until the rebuilding should be finished, was made perpetual by the 22nd and 23rd Charles II., c. 17, s. 3, and by the 7th of Anne, c. 9 ; the persons so appointed are empowered to execute within the city and liberties, all the powers given to be vested in any Commissioners of Sewers in any other county or place, and are to be deemed and taken to be Commissioners of Sewers within the limits aforesaid, subject, nevertheless, to the limitations and directions of the said first recited statute.

Early in the reign of George III., Acts for the better paving, cleansing, and lighting of the city and liberties of London, more expressly vested in these Commissioners the sole power and authority of pitching, paving, cleansing, and enlightening the streets, lanes, &c. within the same ; but they were repealed and superseded by the 11th of George III., c. 29, which (explained and rendered more effectual by the 18th George III., c. 66, 33rd of George III., c. 75, 57th George III., c. 29, and the 4th of George IV., c. 114), is the statute by which the Committee of Common Council above described are constituted Commissioners for "making, enlarging, amending, and cleansing the vaults, drains, and sewers, within the city and liberties of London, and for paving, cleansing, and lighting the streets, lanes, squares, yards, courts, alleys, passages, and places, and preventing and removing obstructions and annoyances within the same ;" one of its principal views being to make the rates, already raised for paving, cleansing, and lighting, suffice to defray the expense of making new sewers where wanted, and enlarging and altering the old ones, and to charge the expense of *repairing and cleansing* the sewers separately upon the landlords or proprietors of the houses and lands within the city and liberties. The older rates are those termed the "Consolidated Rates ;" and the rate levied for the latter purposes, the "Sewers' Rate."

In the *city* "there are 88 Commissioners of Sewers appointed under the provisions of the statute 11 Geo. III., c. 29. That statute directs that the Recorder and Common Serjeant shall be Commissioners, and that the remaining Commissioners shall be appointed by the Common Council. The Common Council appoint all the 26 aldermen, and all the 30 deputies, and 30 other Common Councilmen, being one from each ward, or division of ward. The aldermen and deputies, by order of Common Council are annually re-elected ; the 30 Common Councilmen hold the office for four years, if they continue to be Common Councilmen, one fourth of the number going out annually. The standing order prohibiting Common Councilmen from being candidates for offices in the gift of the Court appears to be considered inapplicable to this Commission. Other standing orders provide that no placeman or servant of the city, nor member of the Court receiving emolument from the public money, except the coal and corn meters in trust, and members holding commissions in the Royal London Militia, nor any person who has been bankrupt, and has not paid 20s. in the pound, shall be eligible to serve on any Committee or Commission appointed by the Court. Where a deputy is disqualified under these orders, an additional commoner is chosen for Commissioner from the Common Councilmen of the same ward or division of ward. If an alderman be so disqualified, his place

is not filled up. A fresh Commission issues every year under the City Seal.”\*

Seeing that this body is a mere committee of the Common Council, with an allowance as such, and that the property of the sewers, pavements, &c., is expressly vested by statute in the corporation, it is somewhat extraordinary that its members should affect to consider that it does not form a part of the Corporation of London; but the reason may probably be found in the ineligibility for employment by the Commission under which Common Councilmen, in the true supposition, are legally placed, by the standing orders of the Common Council. All question, however, of the real character of this body was set at rest by resolution of the Court of Common Council, on the 20th of January 1837, on appointing the Commissioners for the ensuing year, to the effect “that the Commissioners of Sewers, being appointed by this Court, are hereby declared to be under its direct control, as all Committees appointed by this Court are and ought to be; and the Commissioners are hereby directed to report their proceedings and expenditure to this Court, whenever required so to do by a resolution thereof; and that all applications respecting parliamentary business relating to the Commissioners of Sewers be referred to the Parliamentary Committee.”† By a subsequent resolution of the 9th of February, in the same year, the chairman for the time being, of the Commissioners of Sewers, is made a member of the Parliamentary Committee.‡

The Commissioners have by statute the appointment of all their officers. These are a principal clerk, assistant clerk, surveyor, two messengers, three inspectors of pavements, and an inspector of sewers, whose names almost describe their functions. The surveyor directs and superintends under the authority of the Commissioners all works executed in the city in relation to pavements and sewers; measures the work done; examines the accounts, and submits them for payment; draws up such specifications and makes such drawings as may be required; and examines into the applications of individuals, jointly with the Commissioners of their several localities. The senior messenger, besides the usual duties of such a servant, has to keep certain books of hackney carriage fares of Commissioners, of applications, &c. The following is the cost of the whole establishment in 1833, the details of which are here inserted, as affording some idea of the constitution of the several offices of sewers.—(See p. 154.)

The office of the Commissioners is at the Guildhall, where their meetings are held, generally in the Court of Aldermen’s Chamber. “Their jurisdiction extends over the whole of the City and Liberties of London, but they do not pave or light the precincts of St. Bartholomew, Duke’s-place, or Bridewell, and have no concern whatever with Southwark. The Commissioners meet every Tuesday in the year, except in the month of August. Seven make a quorum; the ordinary number in attendance is from 20 to 30. They sit to hear complaints and to receive applications for liberty to do certain acts which they have power to authorize. The Commissioners meet alternately, morning and evening, and tea and coffee are provided for them. Five or six times a-year they

\* Report of Corporation Commissioners, p. 51.

† Minutes of Common Council, 1837, p. 24.

‡ Ibid, p. 31.

*A Statement of the Establishment and Expenses of the Commissioners of Sewers for the City of London.*

(From the Report of the Revenue Committee of the Common Council in 1836, No. 24.)

Officers and their Emoluments.	From Statutory Funds	From other Sources.	Total.
	£. s. d.	£. s. d.	£. s. d.
Principal Clerk :—			
Salary from Consolidated Rate Fund . . . . .	400 0 0		
Salary from Sewer Rate Fund . . . . .	100 0 0		
		..	500 0 0
Assistant Clerk :—			
Salary from Consolidated Rate Fund . . . . .	300 0 0		
Salary from Sewer Rate Fund . . . . .	60 0 0		
		..	360 0 0
Surveyor :—			
Salary from Consolidated Rate . . . . .	500 0 0		
Allowance of 1½ per cent. on new Sewers	112 2 6		
Fees on licensing hoards and scaffolds . . . . .	..	40 0 0	
			652 2 6
Senior Messenger :—			
Salary from Consolidated Rate Fund . . . . .	123 15 0		
Salary from Sewer Rate Fund . . . . .	50 0 0		
Allowance for extra services . . . . .	40 0 0		
Profits on Summonses . . . . .	..	32 10 0	
			246 5 0
Second Messenger :—			
Salary from Consolidated Rate Account . . . . .	111 10 0		
Gratuity from said Fund . . . . .	40 0 0		
		..	151 10 0
First Inspector of Pavements (East District) :—			
Salary from Consolidated Rate Fund . . . . .	191 0 0		
		..	191 0 0
Second Inspector (Middle District) :—			
Salary from Consolidated Rate Fund . . . . .	171 0 0		
		..	171 0 0
Third Inspector (West District) :—			
Salary as above . . . . .	..		
		..	171 0 0
Inspector of Sewers :—			
Salary from Sewer Rate Fund . . . . .	191 0 0		
		..	191 0 0
To the Chamberlain's Clerks, allowance :—			
From Consolidated Rate Account . . . . .	170 0 0		
From the Sewer Rate Account . . . . .	30 0 0		
		..	200 0 0
Gratuity to the Hall-keeper and his Assistants	31 10 0		
		..	31 10 0
Allowance for cleaning Offices . . . . .	8 0 0		
		..	8 0 0
To James Dickenson, late Assistant Clerk, } allowance from Consolidated Rate Fund . . . . . }	100 0 0		
		..	100 0 0
To Amount paid for Tavern Bills of the } Commissioners of Sewers for the year 1833 }	407 1 7		
To ditto for Tea and Coffee . . . . .	79 19 6		
		..	487 1 1
To sum paid from the City's cash for a Sum- } mer Excursion . . . . . }	..	150 0 0	150 0 0
			3610 8 7

have a dinner. They have no line money. Their expenses are charged on the rates levied under the Act.

"The sewers' rate cannot exceed 4*d.* in the 1*l.*, and the consolidated rate cannot exceed 1*s.* 6*d.* The sewers' rate is made by the Commissioners and collected by their officers, whom the Common Council recommend in each ward.\* The consolidated rate is made by the Common Council of each ward, in obedience to a precept from the Commissioners, directing them to make a rate at so much in the 1*l.*, and separate officers are appointed in each ward to collect it. The assessed tax book has been generally made the foundation of the sewer rate, and the Common Councils of the wards have usually followed the sewer rate in making the consolidated rate, a copy of which is sent to the Commissioners. The rates are paid into the Chamberlain's office, to the account of the Commissioners, and an abstract of the receipts and payments is printed with the annual account of the city cash. By 4 Geo. IV., c. 114, s. 19, parties who think themselves aggrieved by the consolidated rate, have an appeal to the Commissioners of Sewers. The objection stated in reply to a question, whether these rates might not be consolidated and collected together, was, that one was a landlord's rate and the other a tenant's rate. The bedels of the several wards are generally the collectors of the sewers' rate; they give security, and are paid by a poundage. The collectors of the consolidated rate, in most of the wards, collect gratuitously, and give no security. In Langbourne Ward it has become the custom to take security, and pay the collector by a poundage, since the ward lost 300*l.* by the defalcation of a collector. The same thing is done in Walbrook and in Farringdon Without."†

All property in the sewers and public drains and vaults, and in the pavements in the city and liberties, and in the materials used in the same by the Commissioners, is vested in the Corporation, in whose name the Commissioners are authorized to bring actions, or prefer indictments, against persons damaging or abstracting the same. The whole expenditure on sewerage is now defrayed out of the sewers' rate, without any aid from the consolidated rate, as formerly afforded under the 11th of Geo. III., c. 29; the Commissioners acting with the authority of all other Commissioners of Sewers, exercising the powers conveyed by the special statutes already recited, and deriving some further authority from the Finsbury Sewers' Act of the 18th of Geo. III., c. 66.

In the year ended at Michaelmas, 1833, the income from the sewers' rate was 9,718*l.* 9*s.* 4*d.*, and the expenditure upon the sewers 12,970*l.* 16*s.* 8*d.*;‡ the excess of expenditure being more than defrayed by a transfer of 8,000*l.* from the consolidated rate fund. In the year ended at Michaelmas, 1840, the respective sums were 20,636*l.* 9*s.* 4*d.* and 17,443*l.* 15*s.* 6*d.*, and in the year ended at Michaelmas, 1842, as follows:—

\* They are allowed 5 per cent. on the sums they pay into the chamber to the account of the Commissioners.

† Report of the Corporation Commissioners, p. 174.

‡ See Schedule B, No. 49, Part II. c. 8.

*An Account of Monies received and paid by the Chamberlain of the City of London, for Making, Maintaining, Enlarging, Repairing, and Cleansing the Vaults, Drains, and Sewers, within the said City and Liberties, pursuant to the several Acts of Parliament of 11 Geo. III., c. 29; 18 Geo. III., c. 65; and 33 Geo. III., c. 77; for One Year ending 29th September, 1842.*

## RECEIPTS.

	£.	s.	d.
Balance in hand on 29th September, 1841, as per statement delivered to the Honourable House of Commons, 22nd June, 1842 . . . . .	7,283	3	7
To cash on account of arrears of sewer rate, due Christmas, 1840 . . . . .	2,186	9	4
To ditto on account of rate, due Christmas, 1841 . . . . .	12,834	1	7
To ditto, compositions for building sewers . . . . .	736	10	0
To ditto in reimbursement of the expense of building private drains . . . . .	505	16	6
	<u>£23,546</u>	<u>1</u>	<u>0</u>

## EXPENDITURE.

	£.	s.	d.
By the expense of building new sewers . . . . .	7,821	13	6
By ditto of making private drains . . . . .	783	1	0
By bricklayers' work in the repairing of sewers . . . . .	3,465	9	6
By salaries to officers . . . . .	815	19	0
By incidental charges and expenses . . . . .	105	14	6
	<u>12,991</u>	<u>17</u>	<u>6</u>
Balance in hand on 29th September, 1842 . . . . .	<u>10,554</u>	<u>3</u>	<u>6</u>
	<u>£23,546</u>	<u>1</u>	<u>0</u>

Chamber of London,  
26th June, 1843.

(Signed)

W. HEYGATE, Chamberlain.

The length of the city sewers has been estimated at 15 miles.\* The finest sewer is that extending from London Bridge upwards towards Moorfields, which is 8 feet 6 inches high by 7 feet wide; but 5 feet by 3 feet is a common size for the other main sewers. The smaller lengths of sewer are from 4 feet 3 inches by 2 feet 3 inches, to 5 feet by 3 feet; the average being nearly 4 feet 6 inches by 2 feet 6 inches, in accordance with the general rule of the Commissioners not to make any sewer so small that men cannot get in to cleanse it. The City Commissioners proceed without the intervention of a jury. The parties requiring sewers to be made come before them. Their application is considered and referred to a future court. In the meanwhile the surveyor is instructed to ascertain the expense of making a sewer. If it is for private benefit he reports his proceedings, and the party is called upon to pay a portion of the amount, as the case may be; and when the payment is made, the Commissioners advertise for tenders to perform the work, if its cost is likely to exceed 50*l*. Whenever any application is made for opening communications with drains, the Commissioners always employ their own surveyor to do the work, and charge the expense on the party. No private drain can be made to communicate with the public sewers without the licence of the Commissioners, and when made, must be kept in repair by the owners. A large part of the City of London, including Cheapside itself, is to the present day, however, without any underground drainage; its night-soil is kept in poisonous pools, of which the inhabitants pump

\* Report of Corporation Commissioners, p. 174.

out the contents into the open channels of the streets in the night, or have them removed by nightmen. Parties applying to have underground drainage would, in fact, be called upon to contribute half the expense of making a sewer. Even where there is a sewer, a guinea fee, divided among the clerks, surveyor, and inspector, must be paid to procure permission to use it. The largest outlets of the city sewerage are the Fleet Sewer, at Blackfriars Bridge, and the Moorgate Sewer, below the Tower; the latter once a wide town ditch on the east, as the Fleet was on the west. Both of them afford passage to upland waters from the Finsbury Trust, the successive improvements and the extension of buildings in which have, at different times, occasioned great injury and loss on these lower levels, for want of simultaneous alterations to dispose of the augmented volume of water descending in time of rain. Indeed, with the exception of Walbrook, these were the only city sewers prior to 1756; all the earlier sewers having been made by private individuals, called adventurers, who, from the time of the Fire, had been encouraged by the Commissioners with authority to receive from those who communicated with the several sewers some contribution towards their cost. Very strong evidence to the fatal effects on health of the cesspool system of the city was given in evidence before the Commons' Committee of 1834;\* and yet the same system prevails extensively in other densely populated parts of the metropolis.

The Commissioners for the *Westminster and Part of Middlesex* district of sewers, besides the powers derived from the general statutes of sewers, &c., possess others, under the 47th of Geo. III., c. 7, local and personal, for enlarging the powers and extending the jurisdiction of these Commissioners; under the 52nd of Geo. III., c. 48, local and personal, for empowering the Commissioners to purchase a message and premises for holding their meetings and for enlarging their powers; and under the 4th and 5th of Will. IV., c. 96, for enabling the Commissioners to make a new sewer at Bayswater. The parishes wholly or in part within the jurisdiction of the Westminster Commissioners, as well under the 47th of Geo. III., c. 7, as under the terms of the commission itself, are those of St. Clement Danes, St. Mary-le-Strand, St. Paul Covent Garden, St. John the Baptist in the Savoy, St. Martin-in-the-Fields, St. Ann Westminster, St. Giles-in-the-Fields (in part), St. George Bloomsbury (in part), St. Pancras (in part), St. John Hampstead (in part), Wilsden (in part), St. Marylebone, St. Mary Paddington, St. George Hanover Square, St. James Westminster, St. Margaret Westminster, St. Luke Chelsea, St. Mary Abbott's Kensington, and part of All Saints Fulham. Included in the Westminster Commission, but not under the Act above mentioned, are the parishes of Hampton, Teddington, Twickenham, Isleworth, Hanwell, Brentford, Acton, Ealing, Hammersmith, and part of Fulham. The tract comprised under the jurisdiction of the Commissioners is divided into four districts, separately rated, and with a separate expenditure. These are: the eastern division of the Westminster Sewers, the western division of the Westminster Sewers, the Ranelagh Sewer, and the Counter's Creek Sewer. The annual rates are generally 1*d.* in the 1*l.* upon land, and from 2*d.* to 6*d.* on houses. The district of the Ranelagh Sewer is subdivided into three different levels, each separately rated.

The number of Commissioners in 1834 was about 250, nine having been added in that year; but the average attendance at the several

\* Minutes of Evidence, p. 113, *et seq.*



meetings of the court during the year 1833 was no more than *eleven*, and very frequently it did not exceed *seven or eight*. "The gentlemen come in and walk out again; they are not men of business; perhaps they do not stop two minutes; still their names are down as gentlemen who attended; and in the list of gentlemen who attended for the day, you would not find one-third of them there united." \* \* \*

"Who are the men that form the Commission? Merely friends of one or two who happen to be there before, who have got no interest whatever in the property."\* The office establishment of these Commissioners, as then described, consists, in the clerk's department, of a clerk, receiving 500*l.* per annum; one office-keeper and crier, 40*l.*; another office-cleaner, 105*l.*; a bailiff and messenger, 40*l.*; and another, 60*l.*; and, in the surveyor's department, of a surveyor, receiving 400*l.* per annum; a clerk of the works, 200*l.*; a second, 130*l.*; a third, 104*l.*; three others, 312*l.*; one labourer in trust, 80*l.*; one, attending the flaps at Westminster, 65*l.*; one, attending the floodgates and open parts of King's Scholars' Pond Sewer, 54*l.* 14*s.*; making a total charge for officers and servants of 2,390*l.* 14*s.* per annum. The office is at No. 1, Greek-street, Soho-square, and meetings of the court are held twice a month. An engraved plan of the sewers was commenced in 1817, and has been progressively perfected; a copy being sent, with the regulations of the Commissioners, to the vestry of each parish within their active jurisdiction. The total amount received during the ten years, from 1831 to 1840 inclusive, was 233,038*l.* 10*s.* 7*d.*, and the sum expended 230,207*l.* 16*s.* 9*d.*

*An Account of Monies received and paid by the Commissioners of Sewers for the City and Liberty of Westminster, and part of the County of Middlesex, in the Year 1840.*

#### RECEIPTS.

	£.	s.	d.
Collected on rates . . . . .	21,837	5	3
Contributions towards expense of sewers . . . . .	520	10	0
Contributions towards expense of gully drain flaps . . . . .	60	15	0
Total . . . . .	£22,418	10	3

#### EXPENDITURE.

	£.	s.	d.
Works . . . . .	18,498	7	11
Establishment . . . . .	2,495	7	0
Occasional services . . . . .	264	10	0
Stationery and printing . . . . .	260	4	8
Office expenses . . . . .	142	14	0
Law charges . . . . .	98	0	2
Advertisements . . . . .	43	14	11
Fees on estreats of fines in Exchequer . . . . .	1	0	0
Copies of parochial assessments . . . . .	61	19	0
Expenses of juries . . . . .	59	9	0
Postage of letters . . . . .	12	13	5
Wages and expenses of Commissioners . . . . .	332	4	0
Instalments and interest on 3,500 <i>l.</i> Exchequer Bills. granted towards expense of tunnel sewer in Edg- ware-road, pursuant to Act 3 and 4 Will. IV., c. 96 }	287	0	0
	£22,557	4	1

\* Evidence of Mr. William Fowler, one of the Commissioners, before the Commons Committee on Sewers in 1834, p. 134.

The sum included under the head of receipts is the net amount applicable to the expenditure, after deducting allowances to collectors, stamps for receipts, deficiencies allowed by the Commissioners on appeal, and assessments unpaid on the closing of the books, and therefore carried forward to the ensuing rate. There are, under this Commission, 134 miles of arched or covered sewers, of which 93 miles are constructed with curved bottoms. "The rest are of old construction, with flat bottoms, which are either rebuilt from time to time, as occasion may require, or a new invert is inserted, varying from a segment to a semi-circle; and as soon as that is done, the necessity of cleansing is superseded, and the sewers have kept themselves in perfect order, without accumulations of soil."\* The width of the second-sized sewers is sufficient to permit two workmen to pass each other.

The Commission of Sewers for *Holborn and Finsbury*, and part of the county of Middlesex, is aided by Local Acts of the 18th George III., c. 66, and the 54th George III., c. 219, and comprises the northern parts of the metropolis, distinguished in two divisions, which have a separate rating and expenditure. The Holborn division comprises a large portion of the parish of St. Pancras, of which one-third is included under the Westminster and Regent-street Commissions, and a large portion lies beyond the supposed limits of the rateable jurisdiction of the Commissioners, viz., two miles from the city; and together with this, the whole parish of St. Andrew, Holborn, two-thirds of the parish of St. Giles and St. George, Bloomsbury (of which the remainder is under the Westminster Commission), and the liberty of the Rolls. The Finsbury division comprises the parishes of St. James and St. John, Clerkenwell; St. Luke, Old-street; St. Mary, Islington; St. Sepulchre, Middlesex; St. Leonard, Shoreditch; and the Liberties of Glasshouse-yard and Norton Folgate; but a small portion of St. James, Clerkenwell, and a large part of St. Mary, Islington, are beyond the supposed limits of the rateable jurisdiction, and are therefore exempt from rates. Hornsey, Finchley, and Friern Barnet, are also nominally within the same jurisdiction; but it is actually exercised a very little beyond two miles northward from the city bounds. The number of Commissioners in 1834, was 173, of whom 81 had qualified; but the actual duties of the Commission were, as now, discharged by an acting committee of 15, called the General Committee, and a committee of six, for accounts; the general courts being held only quarterly. The office establishment of this trust, consisted at the same period of two joint clerks, receiving 440*l.* per annum; a surveyor, 171*l.* 5*s.* 6*d.*; a second surveyor, 200*l.*; a summoner and crier, 40*l.*; an office-keeper, 100*l.*; an inspector 100*l.*; a second inspector 100*l.*; and a clerk of the courts, 78*l.*; making a total charge, for servants and offices, of 1,129*l.* 5*s.* 6*d.* The office is in Hatton-garden.

Rates of 6*d.* in the 1*l.* are levied without the intervention of a jury, at intervals of two, three, or even four years; and the amount levied and expended in the ten years ended with 1840, was, in the Holborn division, 58,203*l.* 3*s.*, and 53,218*l.* 0*s.* 3*d.*; in the Finsbury division, 56,830*l.* 15*s.* 2*d.*, and 56,027*l.* 8*s.* 11½*d.* The last rate in each of these divisions, of which accounts have been laid before Parliament, is that

\* Report made by the chairman to a special court, 23rd December, 1842.

of 1839. The amount levied on the Holborn division, in that year, was 16,473*l.* 18*s.* 10*d.*, of which 15,764*l.* 5*s.* 1*d.*, was collected, at a commission of 6*d.* in the *l.*, leaving a deficiency of only 706*l.* 6*s.* 10½*d.*, arising from relief given to parties for unoccupied land and houses, or being over-rated for houses assessed while in progress of erection; deductions in respect of small houses separately assessed, but for which the rates were paid collectively by the landlords at a composition; and other deductions in respect of property situated beyond the supposed limits of the Commission. In the Finsbury division, the amount assessed was 15,759*l.* 12*s.* 9*d.*, of which 15,511*l.* 19*s.* 11*d.*, was collected at a commission of 9*d.* in the *l.*, leaving a deficiency of only 958*l.* 2*s.* 4*d.* The expenditure in the two divisions, in that and in the following year, when no assessment was made, was as follows:—

*An Account of Monies paid by the Commissioners of Sewers for the Holborn and Finsbury Divisions, Middlesex, in the Years 1839 and 1840.*

	Holborn Division.			Finsbury Division.		
	1839	1840		1839	1840	
	£. s. d.	£. s. d.		£. s. d.	£. s. d.	
Collector's Poundage and Expenses } for Stamps and Brokers. . . . }	453 15 3	. .		581 12 6	. .	
Works . . . . .	1,564 19 2	7,491 10 4		6,128 4 7	7,337 16 2	
Officers' Salaries, and Clerks of the } Works, and Messengers' Wages . }	670 1 6	761 6 3		702 15 0	671 6 5	
Preparing Rate-books, Contracts, and } Bonds; Stamps, Law and Parlia- } mentary Charges; Fees paid at } Crown Office; Advertisements; } also occasional Allowances to Offi- } cers for extra Services; and Pay- } ments to Vestry Clerks for Copies } of Poor's-rates. . . . .	80 5 3	52 11 2½		169 18 3	48 1 11½	
Printing Forms of Rate-books, War- } rants, and other Documents, in- } cluding the annual Publication of } the Accounts . . . . .	51 1 0	75 16 6		38 19 6	108 15 6	
Stationery and binding Rate-books, } Books of Account, mounting Plans, } Surveying Instruments, and annual } Gratuity to Bank Clerks . . . }	69 11 11	51 7 4½		57 19 5	68 12 0	
Rent, Taxes, and repair of Commis- } sioners' Office; Coals, Gas-lighting, } Housekeeper's Wages, and Petty } Disbursements for the Office . . }	178 8 7½	151 3 5¾		180 7 9½	162 10 6¼	
Remuneration to persons receiving } Damage from the Sewers . . . }	. .	. .		. .	11 0 0	
The City of London, for annual Rent } of the Finsbury Prebendal Estate } Sewer, under the Act 18 Geo. III. } c. 66. . . . .	. .	. .		150 0 0	150 0 0	
Contingent Expenses attending the } Commissioners' Meetings, under } the Act 54 Geo. III. c. 219 . . . }	178 5 11	197 13 6		178 4 9	197 13 0	
Total of Expenditure . . .	3,246 8 7½	8,781 8 1¼		8,128 2 9½	8,755 15 6¾	

There is a separate rating and expenditure, not only for each division but for each district of a main sewer; as for the respective sewers of

Gray's Inn-lane, Holborn, Leather-lane, Field-lane, the Southampton estate, and Chancery-lane, and the northern sewer, in the Holborn division; and those of St. James Clerkenwell, St. John Clerkenwell, St. Luke Islington, St. Sepulchre, Glasshouse-yard, Moorfields, Hoxton, and Churchend, in the Finsbury division.

The Commissioners of Sewers for the *Tower Hamlets* (exclusive of St. Catherine's and Blackwall Marsh), possess only the powers conveyed to them by the general statutes of sewers, and have jurisdiction over nearly all the eastern parts of the metropolis north of the Thames; their Commission comprising the parishes of St. John, Hackney; St. Matthew, Bethnal-green; Christchurch, Spital-fields; St. Paul, Shadwell; St. John, Wapping; St. George in the East; St. Mary, White-chapel; St. Botolph, Without Aldgate; Trinity, Minories; St. Mary, Stratford-le-Bow; St. Leonard, Bromley; and All Saints, Poplar; the hamlets of Mile-end Old Town, Mile-end New Town, and Ratcliffe; and the liberties of the Tower Without, and the Old Artillery-ground; but parts only of the parishes of St. John Hackney, and St. Leonard Bromley, and All Saints Poplar, are liable to be rated; while that of St. Mary Stratford-le-Bow, is wholly exempt from the Commissioners' power of taxation.

The number of Commissioners in 1834 was 186, of whom 96 had qualified; and the average in attendance at courts, in 1838, was about 25; but the real business of the Commission is devolved upon an acting Committee, who pass the most important subjects through the Court, but are necessarily the real administrators of the trust; and the number attending in it, during the same year, varied from 6 to 8. The office is at Great Alie-street, Goodman's-fields. Rates at 6*d.*, 9*d.*, and 1*s.* in the 1*l.*, are levied at intervals, generally of 3 years, with the formal intervention of a dining jury; the different amounts being levied according to the exigencies of the "level" or district upon which they are laid. There are seven of these levels, viz., the Spitalfields, Wapping, and Nightingale-lane Level, the Limehouse Level, the Upper Limehouse Level, the Tower-hill Level, the Lower Wapping or Greenbank Level, the Hermitage-street Level, and Hackney Brook Level. The receipts for the whole during the 10 years, ended with 1840, amounted to 74,713*l.* 19*s.* 4*d.*, and expenditure to 67,005*l.* 15*s.* 7*d.* The last general assessment, before the close of this period, was in 1838; but there were some later levies of arrears on Hackney Brook Level.

The length of the sewers within the Tower Hamlets Division, is about 45 miles; viz., 28 of arched sewers with semicircular bottoms, 9 arched sewers with flat bottoms, and 8 of open sewers. From the year 1830, up to the present time, comprehending the entire period of the present and the last preceding commission of sewers, for this district, nearly 60,000 feet, or upwards of 11 miles, of new sewers have been executed and completed in various parts of the district; upwards of 3700 feet of open sewer have been arched over; upwards of 8700 feet of sewers built by individuals, have been taken under the jurisdiction of the Court; and the existing sewers have been constantly and effectually cleansed and repaired.\* Such is the statement of the Commissioners; yet of all the districts, there is none more defective than this in underground sewerage.

\* Report of the Surveyor to the Court, 11th April, 1843.

*An Account of the Monies received and paid by the Commissioners of Sewers of the Tower Hamlets during the Years 1838, 1839, and 1840.*

	1838			1839			1840		
	£.	s.	d.	£.	s.	d.	£.	s.	d.
<b>RECEIPTS.</b>									
Collected on Rates . . . . .	15,470	13	1	7,985	0	6	6,434	0	4
Sundry persons, in aid of building new Sewers . . . . .	.	.	.	.	.	.	400	0	0
Amount of treble Damages recovered from W. Stidolph, in an action brought by him . . . . .	.	.	.	0	3	0	.	.	.
<b>Total . . . . .</b>	<b>15,470</b>	<b>13</b>	<b>1</b>	<b>7,985</b>	<b>3</b>	<b>6</b>	<b>6,834</b>	<b>0</b>	<b>4</b>
<b>EXPENDITURE.</b>									
Works . . . . .	4,338	15	11	5,554	6	6	8,992	17	6
Establishment . . . . .	1,088	4	0	924	4	9	909	18	0
Occasional Services . . . . .	.	.	.	.	.	.	45	10	0
Stationery and Printing . . . . .	52	6	7	94	10	5	45	13	8
Office Expenses and Repairs . . . . .	135	12	0	316	14	5	733	0	7
Law Expenses . . . . .	259	8	8	203	19	0	27	12	0
Parliamentary Charges . . . . .	.	.	.	6	3	0	.	.	.
Expenses of Juries, Presentments, Assessors, and Rate-books . . . . .	121	0	8	243	0	0	123	11	5
Drawing Plans, extra Surveys, and Instruments . . . . .	.	.	.	.	.	.	22	1	0
Contingencies . . . . .	27	11	0	402	19	2	485	4	0
Compensation for Injury to Premises . . . . .	7	0	0	5	0	0	14	0	0
Suing out new Commissions . . . . .	10	10	0	.	.	.	.	.	.
<b>Total . . . . .</b>	<b>6,040</b>	<b>8</b>	<b>10</b>	<b>7,750</b>	<b>17</b>	<b>3</b>	<b>11,399</b>	<b>8</b>	<b>2</b>

The *Blackwall, or Poplar and Stubenheath Marsh* Commission of Sewers, existing solely under the general statutes of sewers, has for its object the original purpose of such commissions, viz., the drainage of a marsh, rather than the sewerage of a city. It comprises only part of the parish of All Saints, Poplar, together with a very small portion of that of St. Anne's, Limehouse; the population of the district assessed, being estimated, in 1834, at only 2,500; and the number of houses assessed, only about 450. The number of Commissioners was 60 or 70; the number who had qualified, about 40; and the number generally in attendance, 7 or 8, though sometimes not so many. Here some of the proprietors are bound by tenure to maintain the river wall next the Thames, and the cost of the rest of the works is defrayed by general assessment. The presentment of the jury is divisible under three heads; first, as to the assessment; second, as to the work to be done by private individuals; and third, as to the work to be done at the general charge of the level; which latter comprises the repairs of sluices, the cleansing the public sewers, and keeping up that part of the embankment which is subject to the general marsh charge.

The proceedings of this Commission, however, while it maintains a separate existence, can scarcely be said to form any part in the economy of the metropolis, except that it levies a large amount of rates

on the West India Dock Company. Between the Blackwall and Tower Hamlets jurisdictions and the river Lee there is yet another tract of Marsh, which is under the Commissioners of Sewers for the Becontree Hundred in the County of Essex, and Bromley West Marsh in the County of Middlesex, whose jurisdiction extends down to Dagenham, and up to Walthamstow.

The Commissioners of Sewers from the river Ravensbourne, in Kent, to the Ember branch of the river Mole, in Surrey, comprise under their jurisdiction over the "*Sewers of Surrey and Kent*," the whole of the metropolis south of the Thames. Their powers in the urban part of this district are extended by a statute of the 49th of George III., c. 183, (1809), "for making new sewers and drains, and amending the present sewers and drains, within certain districts, under the jurisdiction of the Commissioners of Sewers, &c.;" by one of the 50th of George III., c. 144, (1810), for amending, enlarging, and extending the powers of the preceding Act; and by one of the 53rd of George III., c. 79, (1813), for further enlarging the same. These local acts have the effect of dividing the whole district into two parts; one extending from the Ravensbourne, westward to Battersea and Clapham, which is under the provisions of these statutes; and the other extending from thence to East Moulsey, which is still under only the general law of sewers. The local acts were sought by the Commissioners, on account of the great extension of building, and the interruption of the sewers; and they comprise the parishes of St. Paul and St. Nicholas, Deptford, and the manor of Hatcham, in Kent; the five borough parishes of St. George, St. Saviour, St. John, St. Olave, and St. Thomas, with the Clink liberty; the suburban parishes of Bermondsey, Rotherhithe, Newington, and Lambeth; and parts of those of Camberwell, Clapham, and Battersea, all in the county of Surrey. The local acts give the Commissioners power to raise money to make new sewers; but there has always been considerable doubt whether the Commissioners have power to arch over existing sewers, because such a work is beyond a "reform." Rates at a shilling in the pound are made once every two or two and a-half years by the Commissioners without a jury; and under the local acts loans are raised for the execution of new sewers. About 23 or 24 Commissioners usually attend the Court, and they levy rates without the intervention of a jury. The amount received by the Commissioners throughout their whole districts, during the eight years ended with 1840, was 175,137*l.* 17*s.* 9*d.*; and the amount expended, 173,763*l.* 11*s.* 3*d.*—(For Table, see p. 164.)

The still open sewer from Brixton to Vauxhall, liable to dangerous floods, is a reproach to the management of this district, scarcely removed by the clerk's avowal before the Commons' Committee in 1834, that the Commissioners considered it no part of their duty to protect the public against offensive effluvia.

The *Commission of Sewers for Regent-street* has charge, under the local act of the 43rd of George III., c. 121, merely of a single level, carved out of a former more extensive level of the Westminster Commissioners. The Commissioners of Sewers for *East Greenwich Level* attend to the drainage of Greenwich Marshes and the maintainance of a certain portion of the banks of the river Thames; but the town of Greenwich and the other suburbs of the metropolis east of the Ravensbourne are unprovided with sewers.

*An Account of the Monies received and paid by the Commissioners of the Kent and Surrey District of Sewers in 1838, 1839, and 1840.*

	1838			1839			1840		
RECEIPTS.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Moneys received from Rates, at 1s. in } the pound . . . . . }	14,933	15	7	19,489	4	9	17,045	16	2
Moneys received on Loans . . . . . }							2,000	0	0
Contributions in aid of New Works . .	2,914	6	8	744	15	0	3,235	3	9
Incidentals . . . . . }	96	12	6	76	9	0	36	0	0
Receipts from individuals for making } private Drains and Archings . . . }	1,137	5	6	1,540	16	8	1,235	19	10
Total . . . . .	19,082	0	3	21,851	5	5	23,552	19	9
EXPENDITURE.									
Moneys paid to Annuitants . . . . .	2,992	18	8	2,105	8	1	1,688	0	0
Loans repaid . . . . . }							2,123	4	11
Interest on Loans . . . . . }	1,926	9	0	1,966	9	0	1,944	9	0
New Works . . . . . }	6,666	16	6	14,466	15	2	10,356	17	4
Old Works, Repairs, and Castings . .	4,036	7	6	3,830	1	4	5,123	5	4
Officers' Salaries . . . . . }	1,175	0	0	1,175	0	0	1,175	0	0
Sluicekeepers' Salaries . . . . . }	251	11	0	254	14	6	256	17	0
Incidental matters . . . . . }	352	17	9	362	16	2	385	11	6
Making private Drains and Archings } for individuals . . . . . }	2,005	18	8	1,959	18	4	1,365	4	6
Total . . . . .	19,407	19	1	26,121	2	7	24,418	9	7

The Commissioners under all the Commissions are empowered by statute to take a trifling fee from the public rates, of 4s. for each day of their attendance upon the affairs of the Commission; but it is now customary for them to be provided, instead, with a public dinner on each day of their attendance; the cost of which is greater than the aggregate amount of their legal fees would have been. The juries and officers of the several Commissions are also treated on public occasions at the public expense.

The whole of the ancient statutes of sewers, it will thus be seen, provide merely an open surface drainage; and until recently, there were still some doubts whether these statutes give to the Commissioners power to make even a new open drain. But with regard to the covered sewers, which are now a necessary part of the economy of all large towns, as they were in the civilized ages of antiquity, they give no express powers whatever; and local acts having but partially supplied this deficiency, the Commissioners of Sewers in the greater part of the metropolis have to the present day *no power whatever to make a new covered sewer*. Incredible as it may appear, it is not to the present day a recognised purpose of several of the principal Boards of Commissioners to protect the public health, by the *covering* of the sewers, from the noisome effluvia of a city's drainage, but only to effect the mechanical transmission of the superfluous fluids to the Thames, with the express protest that "open sewers being preferable for the purposes of sewerage to arched sewers, the Commissioners do not feel they ought to interfere with the effluvia arising from open sewers."\* When sewers have been arched over, or newly

\* Report of the Commons' Committee in 1834, Minutes of Evidence, Clerks to the Kent and Surrey Commission, &c., p. 97; see also p. 55.

made by private proprietors for the benefit of their property, they are then received into the charge of the Commissioners, and form a part of the general drainage of the district; and are repaired, cleansed, amended, reformed, and rebuilt, from time to time, as may become necessary, at the public expense. Contributions, too, are made towards the execution of many underground sewers of decided public advantage; but from this very proceeding results a gross injustice, for the rating is equal as for a general surface drainage; and thus whole districts are compelled to pay for the advantage merely of particular localities, so long as underground drainage forms no recognised part of the public economy of the town.

Since the Commissioners are not supposed by the law to possess such a thing as an underground sewer, it is not surprising that there are no legal provisions either to compel parties building new houses to the construction of proper sewers opening into them, or requiring a proper side drain to be opened into the nearest sewer from each habitation; but it might have been anticipated that no obstacles would be thrown in the way of arrangements so necessary to health and decency, on the part of the trustees of the public drainage. And yet, by the cavalier tone of an irresponsible administration, the exaction of fees and even fines for the privilege of an outlet, and the monopoly of constructing the required works claimed in some instances for the contractors of the Commission, even though all the expense should be defrayed by the private proprietor, make the attainment of a proper drainage a privilege of price to each individual; of a price, indeed, which all shrink from paying who, or whose tenants, can prevail upon themselves to submit to the existing nuisances, which they most commonly do. Even in the cases where branch sewers are constructed under the direction of the Commissioners, at the cost of the individual, as is common for first-rate houses, the most discordant regulations prevail in different trusts, even as to the form of making them, which, as in the Westminster trust, is obviously very defective; with straight, instead of curved, side walls, exceedingly liable to be crushed in by the contiguous soil. And yet a complete power is possessed by the Commissioners over every individual draining his own property, not only by the authority of the Court, but by their refusal of an outlet, if their instructions are not obeyed.

The regulations of the Westminster Commissioners with regard to the use of sewers when made, will serve as an example of the rules generally observed, where communications with such outlets can be obtained. They are "that no drains shall be laid into a public sewer without a special leave for that purpose from the Commissioners;—that when such leave shall be obtained, the opening into the sewer shall be made, and the drain built, for a length of three feet from the sewer, according to a plan and section approved by the Commissioners; the whole to be done by a workman to be employed by the Commissioners, and paid by the parties requiring the drain, at prices and under regulations specified;—that when builders and other persons are building a sewer, they will be allowed to form the rings required for the drains they may propose to lay into the sewer; in which case such builders or other persons will be required to pay down only the expense of building the 3 ft. 4 in. of drain, next to the ring, which must in all cases be done by a workman employed by the Commissioners;—and that a special leave given for



laying drains into sewers shall remain in force for three months and no longer." It is also pointed out that the lowest pavement of a house ought to be, in ordinary cases, four feet above the bottom of a sewer, to guard the premises from being flooded by water from the sewer; and houses sunk too low are refused communication with the sewer.

The best regulations, with regard to the larger sewers newly constructed by private proprietors, appear to be those of the Holborn and Finsbury Commission, which provide "that all main or leading sewers hereafter to be built within the limits of this Commission, which may receive the sewerage from streets and places containing more than 200 houses, shall be of an *oval* form, 5 feet in height, and 3 feet in width in the clear (except under special circumstances, &c.);—that all branch sewers, that may receive the sewerage from streets and places containing less than 200 houses, shall be of an *oval* form, 4 ft. 6 in. in height, and 2 ft. 6 in. in width, in the clear, &c.; and that the current of all such sewers be not less than one-fourth of an inch to every 10 feet in length, and as much more as circumstances will admit, &c."

The several Boards of Commissioners, as we have already shown, even strain the terms of their Commissions and local acts, to contribute towards the sewers which private proprietors are desirous to make, or to perform the work themselves, on the latter contributing the sum agreed. But the use of the sewers as the grand channels for the clearance of the water closets, and even for getting rid of some portion of the more fluid dirt of the streets, is so modern, that it was not permitted, until the commencement of the present century, to drain private dwellings into the sewers, as they are now drained; cesspools and night-carts being the contrivances until then immemorially employed. Respectable plans of the sewers in the hands of the Commissioners themselves are even still more modern; and if they can now generally form at a glance some idea of the justice of the complaints which are brought before them, still the want of any defence against the horrid gases which are generated in the sewers on the new system, and have a ready opening into every street, and in some parts almost every house, keeps the whole town in daily remembrance of the absurdly anomalous state of this part of its municipal administration. Such are the qualities of these effluvia, that even in the aristocratic parish of St. George, Hanover-square, they are obliged to remove the gully-holes from near the butchers' shops, to permit the meat to be exposed for sale without being corrupted.\*

It is quite impossible to trace out all the diversities of practice between the different Commissions, whether arising from diversities in the provisions of the local Acts possessed by some, or diversities in the interpretation of those and of the imperfect general statutes which govern all, or diversities in the character and station of the casual administrators of both; but the following summary of the results of their inquiry, drawn up by the Commons' Committee of 1834, contains some valuable observations and suggestions, which are as applicable at the present time as at the date when they were made.

"In most of the districts considerable improvements have been effected since the commencement of the present century; and where just causes of complaint have arisen on the part of the public, they ap-

\* Commons' Report of 1834, Minutes of Evidence, p. 59.

pear to have originated in the faults of the *system*, and in a consequent want of power on the part of the Commissioners.

"The defects in the law as it now stands which have most forcibly struck us are these:—

"1st. *A want of uniformity.*

"There are no two districts in which the law does not vary, or where, if the law be the same, the Commissioners do not interpret some parts of it in a different manner.

"Thus, a man having property in Finsbury and in Westminster, or in the City and in the Tower Hamlets, may find himself placed under different systems, and may be led by his knowledge of the regulations of the one district to violate the regulations of the other. This is a source of much inconvenience.

"2ndly. *The want of publicity and of responsibility, systematically enforced.*

"There are several trusts in which the Courts have not been open to the public; where the right of the rate-payers to inspect the accounts is not admitted; and where, consequently, a real responsibility in money matters can hardly be said to exist.

"3rdly. *Equality of rateage with inequality of advantages.*

"The principle on which the sewers rates are levied is this: that all houses are liable to them which either receive a benefit from the sewers, or avoid of damage; and as, directly or indirectly, all are benefited by the surface drainage of the streets, all are liable to the sewers rate. This was a fair principle as long as the surface drainage of the town was alone contemplated; but, with the increase of civilization, the sewers have become applicable to many other purposes, conducive to the health and convenience of the public, in addition to the surface drainage; and it appears to the Committee unjust that the same rate should be levied upon houses enjoying the advantages of an underground communication with the sewers and upon houses possessing no such advantages, and which never can possess them without great additions to the sewerage as it now exists. These additions, the Boards of Commissioners, acting under the old law of sewers, have it not in their power to make; for the old law does not authorize them to make rates for the construction of new sewers, or for covering in old open sewers; nor does it enable them to compel builders to provide new districts with proper access to the main lines of sewers, or to rate old property for the construction of new sewers in districts where there are now none, even in cases where the consent of a great majority of the householders interested might be obtained.

"There is also a great difficulty in fixing the limits of indirect advantage, where there is no underground communication with the sewers; for instance, in the Holborn and Finsbury Trust, the inhabitants of the high lands about Hampstead and Highgate are exempted from the payment of sewers rates, although they are unquestionably benefited indirectly by the sewerage of the lower districts between them and the river, which are forced to provide a passage for their superabundant waters. But a Court of Law has decided that they are not liable, and no rate has been levied for many years by the Commissioners beyond a certain line.

"Now the question is, where this line ought fairly to be drawn, and whether there is any distinction, in point of direct advantage, be-

tween the houses on the rateable side of it and the houses beyond that line which are not rated at all.

“The fourth and last defect which your Committee wish to point out, is the want of system or combination between the different trusts, which have now, as before observed, each an independent action.

“The inconveniences in this are palpable; for, where the line of communication with the Thames is not complete within each district, the very improvements in the one trust may prove injurious to the others. It appears by the evidence that a case of this kind occurred not long ago in the City of London, through which a part of the Holborn and Finsbury sewerage is conducted to the river. The sewers of the Holborn and Finsbury division having been greatly improved and enlarged, the City sewers became inadequate to carry off their contents, and a number of houses, in the vicinity of the river were inundated after each fall of rain; the contents of their own drains, in addition to the waters from the high lands in the neighbouring trust, being absolutely forced back into their houses from the volume of water which occupied the main sewer. This has now been remedied at a great expense to the City of London district, and by dint of much labour and time; but if anything like combination had existed previously, the improvements would have been carried on simultaneously, and the inconvenience would never have occurred.

“A variety of suggestions have been made to your Committee with regard to other defects in the present system, as bearing upon the health of the metropolis; and it has been proposed by medical men of considerable eminence, to purify the air in the main sewers, by building furnaces at intervals along their course, and by closing some of the gully-holes, and providing others with traps. Upon these projects your Committee cannot venture to pronounce an opinion, as none of them have yet been confirmed by successful experiments; nor can they be submitted to this test without a considerable expense. The House will perceive, by the evidence of Mr. Farraday, the opinion which that gentleman entertains of their practicability, which is not at present sufficiently strong to warrant any very sanguine expectations as to the results. The minor improvement of traps for diminishing the emission of foul air from the gully-holes has already attracted the attention of the Commissioners in several of the trusts, and appears to have been applied with success.

“Your Committee now come to the changes which they wish to recommend in the law of sewers as it at present stands; and in these the first object of your Committee will be to remove practical defects, with as little change as possible in the forms of the system, with which the inhabitants of the metropolis are already familiar. It is therefore proposed to preserve the existing trusts in their present divisions, for all purposes of local arrangement.

“The composition of these trusts having given rise to much dissatisfaction, because, although consisting of most respectable individuals, a great proportion of these individuals have neither the time nor the inclination to attend the Courts;

“Your Committee suggest the following remedies:—

“1st. That whenever it shall appear in future, by the books of the different trusts (in which a regular entry shall be made for the purpose), that a Commissioner has absented himself from a majority of the Courts

held for his district within the year, such Commissioner shall be considered as having voluntarily resigned.

"2ndly. That the number of Commissioners in each trust shall in future be fixed.

"3rdly. That vacancies shall be filled up in the City of London by election by the Common Council, as at present; and in other trusts, by the vestries of the parishes in the respective districts, by rotation, and in proportion to their relative population and rental.

"The Committee is of opinion that the system to be pursued in all the trusts thus constituted should be uniform, the Courts fixed and open (with power, however, to summon extraordinary Courts when required); the accounts subject to inspection by all, publicly audited, submitted annually to Parliament, and copies furnished to all rate-payers on demand, at a reasonable price. Works of all kinds should be performed by public contract, with due notice given, in order to encourage competition, but with the understanding that they are to be subjected, as now, to the approbation of the Commissioners, there being no public works in which the inspection of responsible officers is so essential as in those connected with sewers, where defects, concealed easily, if not at once detected, are sure to be brought to light, by entailing upon the district subsequently a load of vexation and expense.

"Your Committee propose that the power of levying rates, when required, should be continued as at present in the local trusts; and that they should also have a power, under certain limitations, of raising money upon the rates, where improvements in the sewerage of a district are obviously necessary, so as to diffuse the expense more equably over a series of years.

"All that your Committee wish to effect by this, however, is to render improvements practicable where they are undoubtedly desirable, which is not always the case at present, from the want of power and of funds.

"It will be essential, too, in order to facilitate these improvements, and to provide for the health of some old and populous districts of the metropolis, where great inconvenience is now experienced by the inhabitants from the want of sewerage, to remove all doubts as to the jurisdiction of the Commissioners, originating in the obscurity of the present laws of sewers, and to give them in all cases power to cover in, enlarge, widen, or otherwise improve open sewers; to compel builders to provide new districts with adequate communications with the main lines of sewers (the want of which has obliged the Commissioners of Woods and Forests to bring in a special Bill, in order to remedy the nuisance arising out of the sewerage of the Bishop of London's estate); to rate old property for the construction of new sewers, and to oblige all houses thus rated to communicate with the sewers when built.

"The sewers rate in general is regarded as a landlord's rate, but is paid in the first instance by the occupying tenant. Your Committee think, therefore, that it would be expedient that, where there is not a special agreement to the contrary, a receipt given to the tenant by the Commissioners should be in all cases a legal set-off against the rent; while houses untenanted for any length of time, and consequently not contributing to the wear and tear of the sewers, might be allowed a temporary exemption from the rate. With regard to the practicability of

varying the amount of the rates according to the extent of the advantages enjoyed, your Committee do not venture to pronounce any decided opinion. The principle on which an uniform rate was originally established has been already explained; and as long as the sewerage was confined to the surface drainage of a district, it was perfectly just. But now that there are so many other advantages connected with the sewerage, it seems desirable to recognize a distinction which exists, *de facto*, in every part of London; and not, at all events, to impose precisely the same amount of rate on streets and houses which have no private underground drains, because there are no sewers within reach into which to lead them, as upon other streets and houses amply provided with the accommodation of public and private drainage.

"Your Committee regret that it should not be in their power to suggest any practicable mode of correcting that want of combination between the different Trusts, which they have alluded to as one of the defects of the present system; but they see so many reasonable objections to a Central Board, superseding in part, or altogether, the local Trusts, a change which would be most unpalatable to the inhabitants of the respective districts, that they cannot recommend it as desirable until, at all events, the effect of the changes suggested in the present Report, should the House think proper to approve of them, shall have been fairly tried."\*

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*An Examination of the Returns made by the various Railway Companies of the United Kingdom, with respect to their Traffic during the year ending 30th June, 1843.* By G. R. PORTER, Esq., F.R.S., Treasurer of the Statistical Society of London.

[Read before the Statistical Society of London, 15th April, 1844.]

THE establishing of railroads to the extent to which the system has now arrived in England, is a fact in various ways interesting and important. That system may be said to have begun with the construction of the short but most useful line between Liverpool and Manchester, in September, 1830. For many years before that time railways had been used for the cheap and easy, but not very rapid, conveyance of great bulk and little value, such as coal and lime; but with the opening of the line just mentioned began the use of the locomotive engine, and the conveyance of passengers at rapid rates of speed. Its success led the way to the immediate construction of other railways in various parts of the kingdom, and it is much to be regretted that means were not at once taken whereby the various effects which these works could not fail to produce upon the social economy of the kingdom might be measured and followed out.

The earliest attempt of the Legislature to supply this information was made in 1840, when the first general Act, known as Lord Seymour's Act, for the regulation of railways, was passed. Under this Act, a department of the Government was created, to which power was given to call for some few among the statistical details which the different companies were qualified to furnish. These details were thereupon required, according to forms so prepared, that in answering them nothing should

\* Commons' Committee's Report, 8th August, 1834, Sess. 1834, No. 584.